

Speed Letter®

QTYCF 8.4.2.1
3/18/1987

To Shannon and Wilson, Inc.
1105 N. 38th Street
P.O. Box C-30313
Seattle, WA 98103-8067

From D.A. Bell
999-Third Ave-Suite 2200
Seattle, WA 98104-1105

Subject ATTN: H.H. Druebert

--No 9 & 10 FOLD

MESSAGE

Attached are 3 copies of contract dated March 16, 1987 covering your services relating to slide @ M.P. 7 near Bellevue, WA. Please sign "Contractor's" copy and "Burlington Northern" copy and return. You may retain additional copy for your file.

cc: W.T. McCarthy

Date 3/18/87 Signed

D.A. Bell

REPLY

--No 9 FOLD

--No 10 FOLD

Date

Signed

Wilson Jones

GRAYLINE FORM 44-902 3-PART
©1983 • PRINTED IN U.S.A.

SENDER—DETACH AND RETAIN YELLOW COPY. SEND WHITE AND PINK COPIES WITH CARBON INTACT.

USEPA SF



1337715

GENERAL CONTRACT

BURLINGTON NORTHERN RAILROAD COMPANY

Date AGREEMENT made the 16th day of March, 1987, between BURLINGTON NORTHERN RAILROAD COMPANY, hereinafter called the "Company," and

Parties SHANNON & WILSON, INCORPORATED
Geotechnical Consultants
1105 N. 38th Street
P. O. Box C 30313
Seattle, Washington 98103-8067

hereinafter called the "Contractor."

The Contractor, in consideration of the payments and covenants hereinafter mentioned to be made and performed by the Company, hereby agrees to furnish all labor, services, appliances, tools and material for, and, except as may be hereinafter otherwise provided, to construct, install, complete and finish in the most thorough workmanlike and substantial manner in every respect, within the time hereinafter specified, and according to the plans and specifications hereinafter identified and hereto annexed and made a part of this contract, and to the satisfaction and acceptance of the Company, the following work, viz.:

Work Provide engineering services for the development of remedial measures for landslide near M.P. 7 south of Bellevue, Washington, per Contracting proposal dated March 5, 1987, marked Exhibit "A" attached.

Date of Work to be started Upon notice to proceed.
Completion Work to be completed on or before April 15, 1987.

Definition of Where the word "Engineer" occurs in this contract or specifications attached hereto, it
Terms Engineer refers to the Engineer of the Company representing the Company in connection with this
and Chief contract, and "Chief Engineer" means Chief Engineer Region, of the Company.
Engineer

Permits and The Contractor, ~~at its own expense~~ shall obtain all necessary permits and licenses and
Licenses shall comply in all respects with any and all ordinances, laws or regulations, federal, state and local, properly applicable to the work.

Independent The Contractor shall prosecute and complete the work according to the Contractor's own
Contractor manner and methods and with and by the Contractor's own means and employees, free from any supervision, inspection or control whatever by the Company, except only such as may be necessary to enable the Company to determine whether the work performed complies with the requirements of this contract and conforms to the plans and specifications, it being the intention of the parties hereto that the Contractor shall be and remain an independent contractor and that nothing herein contained shall be construed as inconsistent with that status.

Prices for The price to be paid by the Company for the work is as follows:
Work Not to exceed lump sum cost of \$7,555.00 unless approved by Chief Engineer.

Extra Work and Bills Therefor	For extra work authorized in writing by the Chief Engineer, payment will be made to cover direct cost for such work in accordance with Contractor's current fee schedule marked Exhibit "A" attached.
Final Estimate Time of Payment of Final Estimate Release	When in the opinion of the Engineer this contract and all things herein agreed to be done by the Contractor shall have been completed according to the provisions hereof and within the time herein limited, the Engineer shall so certify in writing and give a final estimate and statement of the balance. The Contractor prior to final payment will execute, acknowledge and deliver to the Company a valid discharge from all claims and demands growing out of or connected with this contract. Payment for invoices will be due thirty (30) days from receipt of invoice.
Power to Cancel Contract Account Default of Contractor	If the Contractor at any time shall fail to perform any agreement herein contained, the Company may at its option cancel this contract.
Workmen's Compensation	The Contractor, at its sole cost and expense, shall comply with all laws of the State where this contract is to be performed relating to workmen's compensation covering all employees of said Contractor or of any subcontractor employed to perform work under this contract.
Liens	Before final settlement is made, the Contractor shall furnish to the Company satisfactory evidence that the work is free and clear from all liens for labor or materials, and that all payroll taxes have been paid, and that no claim exists out of which a lien may grow.
Records and Audits	The Contractor shall check all materials, equipment, labor and services entering into or becoming a part of the work, and shall keep such full and detailed accounts, books and records as may be necessary for proper financial management under this Contract and such as will properly, fully and correctly reflect the transaction contemplated hereby, all to the reasonable satisfaction of the Company. The Company, at all reasonable times during normal business hours, shall have the right to inspect, audit and reproduce all the Contractor's records, books, documents, correspondence, instructions, drawings, receipts, vouchers, memoranda, similar data, and other evidence and accounting procedures and practices in any manner relating to this Contract and the work performed and services rendered hereunder. The Contractor shall preserve all such records for a period of three years after the date of final payment under this Contract.
Indemnity	The Contractor shall indemnify and save harmless the Company from any and all claims, suits, losses, damage or expenses on account of injury to or death of any and all persons whomsoever, including the Contractor, subcontractors, employees of the Contractor, subcontractors and of the Company, and any and all damage to, loss or destruction of property arising out of sole negligent acts, errors, or omissions of the Contractor or its employees in the performance of this contract; notwithstanding in any jurisdiction where indemnification against one's so negligent is prohibited by law, nothing herein is to be construed as an indemnification against the sole negligence of the Company, its officers, employees or agents. The liability of the Contractor under these indemnity and save harmless provisions shall be limited to the amount of insurance coverages available for contractual liability under either contractor's comprehensive general or professional liability insurance policies, whichever may be applicable.

Insurance	The Contractor shall procure and furnish to the Company comprehensive general and professional liability insurance policies, or a certificate with respect thereto thereto.
Engineer's Proessional Liability Insurance	The Contractor shall carry professional liability insurance providing for a limit of not less than <u>\$50,000.00</u> Dollars for all damages arising out of the performance of service in the Contractor's capacity as an engineer caused by an error, omission, or negligent act of the Contractor or any other person or organization for whom the the Contractor is legally liable in any one claim, and subject to the limit for each claim a total aggregate limit of <u>\$50,000.00</u> from all such damage during the policy period.
Approval of Policies by Company	Such policy or certificate with respect thereto, shall be submitted to the engineer for approval as to the insurance company writing the same. The amount and the form and upon insurance company writing the same, the amount and the form, and, upon approval and prior to commencement of the work to be performed under this agreement, the Contractor shall deposit the same with the Engineer.
Sales and Other Taxes	The Contractor, at its sole expense, shall pay all sales tax and other taxes of every kind, nature and description, which may accrue on equipment, material, supplies or fixtures furnished or owned by it or its subcontractors in connection with the work contemplated by this contract, and the Contractor shall furnish to the Company satisfactory evidence that all such taxes have been paid.
Bond	If required by the Company, the Contractor shall furnish to the Company a bond in amount, form and substance satisfactory and acceptable to the Engineer, which shall provide that the Contractor shall well and faithfully keep, perform and carry out each and all of the terms, conditions and provisions of this contract. If a bond is required, the Company will reimburse the Contractor for the cost thereof.
Equal Employment Opportunity	The nondiscrimination clauses 1 through 7 contained in Section 202 of Executive Order 11246, relative to Equal Employment Opportunity, are incorporated herein.
Execution	IN WITNESS WHEREOF, the parties hereto have caused these presents to be signed the day and year first hereinabove written.

BURLINGTON NORTHERN RAILROAD COMPANY

By _____
(Title)

SHANNON AND WILSON, INCORPORATED

By _____
(Title)



SHANNON & WILSON, INC.

Geotechnical Consultants
Engineering and Applied Geosciences

1105 North 38th Street • P.O. Box C-30313 • Seattle, WA 98103-8067 • (206) 632-8020 • Cable: GEOSAW

March 5, 1987

Burlington Northern Railroad
2000 First Interstate Center
999 Third Avenue
Seattle, WA 98104

Attn: Mr. Howard W. Bacon

**GEOTECHNICAL PROPOSAL FOR LANDSLIDE AT NICHOLS RESIDENCE (MILE POST 7),
BELLEVUE, WASHINGTON**

As requested, we are pleased to submit our proposal for providing engineering services for the development of remedial measures for a landslide that occurred along the Burlington Northern Railroad (BNRR) embankment at about Mile Post 7. The embankment at this location is upslope of the Nichols residence, which is located on Hazelwood Lane off of Lake Washington Boulevard Southeast in Bellevue, Washington. Our proposal is based primarily on documents that were provided by BNRR representatives during a site visit on February 3, 1987. A representative from our firm and a local drilling contractor also visited the site on February 26, 1987.

Site and Project Description

The Nichols residence is located along the shore of Lake Washington. To the east and upslope of the residence is a BNRR track embankment. Immediately east of the tracks, the embankment slopes downward to a drainage depression which is about 10 to 20 feet below the embankment grade. From the base of the depression, and along the drainage ditch, the ground surface rises toward Interstate 405 and a pedestrian path that extends along the west side of the freeway. A storm drain intake is located in the depression and carries run-off beneath the railroad embankment and Nichols driveway to discharge into Lake Washington.

We understand that a landslide occurred on January 18, 1986 during extremely heavy rains. The heavy rains that occurred on this date have been described as the heaviest in 75 years and also as a 100-year storm. A storm drain intake located on the east side of the railroad embankment is reported to have plugged causing runoff water to rise between the freeway right-of-way and the railroad embankment to a height on the order of 20 feet. Shortly after reaching this height, the side of the railroad grade failed with mud and debris landing on the Nichols driveway and flowing into the basement level garage. The slide is reported to have also laterally displaced a rockery along the east margin of

Seattle • Portland • Spokane • Fairbanks • Anchorage • St. Louis

Raymond P. Miller, P.E.
Senior Vice President & Manager

George Yamane, P.E.
Vice President

Harvey W. Parker, P.E.
Vice President

Senior Associates: H.H. Druebert, P.E., Thomas E. Kirkland, P.E., Atef A. Azzam, Gordon E. Green, P.E., Leif G. Eriksson
Associates: Allen B. Gifford, P.E., W. Paul Grant, P.E., Ming-Jiun Wu, P.E., Daniel N. Clayton, C.E.G., Frank W. Pita, P.E., P.G.

EXHIBIT "A"

the Nichols driveway and carport. The concrete driveway adjacent to the house was warped and broken.

Subsequent to the slide, BNRR crews constructed a timber crib wall along the west side of the railroad embankment about 5 feet east of the Nichols rockery. This was to be a temporary measure to repair the embankment and track so that rail traffic could resume.

We understand that BNRR now plans to construct more permanent stabilization measures where the slide occurred.

Scope of Work

In order to develop recommendations for remedial measures, we propose to perform the following scope of work:

● Field Explorations

In order to locate the general surface of the glacially consolidated, hard, clayey silt stratum that is present beneath the slide area, we propose to drill two borings with a truck-mounted Mobil B-61 drill rig. One boring will be drilled through the existing railroad embankment near the location of the storm drain. Based on our March 3, 1987 telephone conversation, we understand that BNRR will provide planking along the railroad embankment for drill rig access to the boring location, which is located about 1,000 feet south of the barricade on Lake Washington Boulevard. We plan to drill and sample this boring to an estimated depth of 40 feet.

We propose to drill a second boring with the truck-mounted drill rig through the Nichols driveway. We understand that BNRR will contact Mr. Nichols for permission to drill the boring through his driveway. We plan to drill and sample this boring to an estimated depth of 30 feet.

An observation well will be installed in each of the borings following completion of drilling to monitor groundwater levels.

In order to determine the depth to the hard, clayey silt east and upslope of the railroad embankment, we propose to drill two to three hand borings on the slope. We plan to extend these borings to a depth of about 10 to 15 feet below the ground surface with hand portable drilling equipment.

Representative samples will be obtained in all borings at about 2.5- and 5-foot depth intervals. For the truck borings, samples will consist of split-spoon samples obtained in conjunction with the Standard Penetration Resistance (SPT) and a few thin-wall tube samples. In the hand borings, samples will consist of split-spoon samples obtained in conjunction with the

Porter Penetration Test. All split-spoon samples will be sealed in jars and thin-wall tubes will be capped and taped. All jar samples and tubes will be transported to our laboratory for testing, as appropriate.

We plan to subcontract the truck-mounted drilling operations to an experienced local contractor (Kring Drilling Company). An engineer or geologist from our firm will observe the drilling, sampling, and installation of the observation wells and will prepare descriptive soil logs in the field. The hand borings will be accomplished by a two-man crew from our firm. Locations of all borings will be established by taping from existing features.

In order to perform stability analyses and develop recommendations for design and construction of remedial measures for stabilizing the slope, an up-to-date topo map of the area is essential, in our opinion. During our field visit on February 3, 1987, you indicated that Shannon & Wilson, Inc. should contact a surveyor and obtain an estimate for providing a topo map of the area in the event that we felt it was necessary. Subsequently, we contacted Wilsey & Ham, Bellevue, Washington, to provide an estimate for producing a topo map of the area.

- Laboratory Testing

Laboratory tests will be performed, as appropriate, for classification and correlation purposes and to determine index and engineering properties of the site soils. We anticipate that the laboratory testing will consist of natural water content determinations, Atterberg Limits, grain-size analyses, and unconfined compression tests.

- Engineering Studies and Report

A report will be prepared which will summarize the field explorations, subsurface conditions, laboratory testing, and the results of engineering studies and analyses. Conclusions and recommendations will be presented concerning slope stability and design and construction of appropriate remedial measures for stabilizing the slope.

Schedule

We are prepared to begin work upon your authorization to proceed. In our opinion, the topo map should be prepared prior to starting the drilling operations. Wilsey & Ham indicated that they have estimated three days in the field and three days in the office for preparing the topo map. The map will cover an area about 500 feet in length in the north-south direction along the railroad embankment and 150 feet in the east-west direction. In addition, Wilsey & Ham would appreciate one to two days lead time before proceeding to the field. This totals to about two weeks.

EXHIBIT "A"

SHANNON & WILSON, INC.

Burlington Northern Railroad
Attn: Mr. Howard W. Bacon
March 5, 1987
Page 4

WP-3052-1

We are prepared to begin the field explorations upon receipt of the topo map. We estimate that our field work could be accomplished in about one to two days. Our report could be completed and delivered to you within about two to three weeks following completion of the field work. Preliminary information will be provided to you informally as soon as it is developed by our studies. Four copies of our report will be provided.

Estimated Cost

We are prepared to undertake the work as described on a time and expense basis. Our fee for the above work and the terms and conditions under which our services are offered will be in accordance with the attached Agreement for Professional Services. The total cost of our services including subcontract work is estimated to be ~~\$11,700~~ which we agree not to exceed without your authorization. This fee includes all work outlined in this proposal through submission of our report.

The following is a breakdown of our estimated cost:

Subcontracts

Drilling Services (Kring Drilling Co.)	\$2,425	
Topo Survey (Wilsey & Ham)	4,145	2,425
		\$ 6,570 HUB

Shannon & Wilson Services

Hand Borings and Drilling Observations	\$1,400	
Laboratory Testing	480	
Engineering Studies and Report	<u>3,250</u>	<u>5,130</u>
		\$ 7,555
Total Estimated Cost		\$11,700 HUB

If this proposal meets with your approval, please sign in the space provided and return one signed copy of this letter, which will serve as your authorization for us to proceed with the work. Should you issue a purchase order for this work, please make this proposal a part of the purchase order.

EXHIBIT "A"

SHANNON & WILSON, INC.

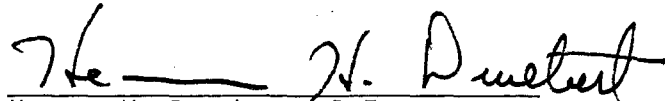
Burlington Northern Railroad
Attn: Mr. Howard W. Bacon
March 5, 1987
Page 5

WP-3052-1

We appreciate the opportunity to submit this proposal and look forward to working with you on this project.

Sincerely,

SHANNON & WILSON, INC.



Herman H. Druebert, P.E.
Senior Associate

HHD/lkn

Enclosure: Agreement for Professional Services - GH-87

I accept the above conditions and authorize the work to proceed.

By _____

Organization

Date

EXHIBIT "A"

SHANNON & WILSON, INC.

Dated: March 5, 1987**AGREEMENT FOR PROFESSIONAL SERVICES**On the Basis of General Hourly Rates For Projects With No Known PollutantsTo: Burlington Northern RR

Attn: Mr. Howard W. Bacon

1. PROFESSIONAL SERVICES BY STAFF AND OFFICERS

Fees for services are based on the number of hours expended on the project, including travel, by professional, technical, and clerical personnel. The fee will be computed by multiplying the number of hours worked by each class of personnel by the hourly rate listed below for that class:

				<u>OVERTIME</u>	<u>SPECIAL SERVICES</u>	
PRINCIPAL	\$95.00	SR. TECHNICIAN/DRAFTER	\$36.00	\$43.00		
SR. ASSOC./STAFF CONSULTANT	86.00	TECHNICIAN/DRAFTER	33.00	40.00	DIR. COMPUTER SCIENCE	\$72.00
ASSOCIATE	73.00	CLERICAL	30.00	36.00	INFORM. RESOURCES SPEC.	51.00
SR. PRINC. ENG./GEOL./HYDRO.	63.00	JUNIOR TECHNICIAN	25.00	30.00	PROGRAM ANALYST	47.00
PRINCIPAL ENG./GEOL./HYDRO.	56.00					
SR. ENG./GEOL./HYDRO.	52.00					
ENG./GEOL./HYDRO.	43.00					
These rates are for Shannon & Wilson's current fiscal year (FY). At the end of each (March 31) rates will be reviewed and adjusted for the next fiscal year.						

These rates are for Shannon & Wilson's current fiscal year (FY). At the end of each FY (March 31) rates will be reviewed and adjusted for the next fiscal year.

2. REIMBURSABLE EXPENSES

Expenses other than salary costs that are directly attributable to our professional services are invoiced at our cost plus 5 percent. Included are expenses for out-of-town travel and living, information processing equipment, instrumentation and field equipment rental, special fees and permits, and premiums for additional or special insurance where required; also specific job-related shipping charges and supplies in excess of \$25. In lieu of charging for miscellaneous individual direct expenses, a 3 percent surcharge will be added to each invoice amount to cover expenses for telephone, local mileage and parking, taxi, reproduction, local and out-of-town delivery service, express mail, photographs, film, and laboratory equipment fees; also specific job-related shipping charges and supplies of \$25 or less.

3. BORINGS, GEOPHYSICAL SURVEYS AND OTHER EXPLORATIONS, FIELD TESTS, LABORATORY TESTS, AND OTHER CONTRACT SERVICES

When we engage a contractor(s) for drilling or other exploration, testing, and/or other contract services, we will invoice you for the contractor's services plus 12 percent. An exception would be work performed by a wholly-owned subsidiary of Shannon & Wilson, Inc. Their invoices will be included in our invoice without markup. Borings, geophysical surveys, pile loading tests, plate bearing tests, in situ tests and other field tests conducted using our equipment and personnel will be billed at either (1) the charge for labor, as computed under the first paragraph of this schedule, plus the rental of equipment at our current equipment rental rate schedule (copy available upon request) or (2) current unit prices, if specified in the proposal. Laboratory tests performed using our equipment and personnel will be billed at either (1) the charge for labor, as computed under the first paragraph of this schedule, or (2) current unit prices, if specified in the proposal.

4. USE OF SUBCONTRACTORS AND CONSULTANTS

With the exception that Shannon & Wilson, Inc. may subcontract all or any part of its work hereunder to one or more of its subsidiary companies, it is agreed that Shannon & Wilson, Inc. may not issue subcontracts exceeding \$10,000 for any part of its work hereunder without your prior written consent, which consent shall not be unreasonably withheld. When considered necessary, other firms or consultants may be utilized with your approval, with the total cost of their services marked up 5 percent to cover taxes, insurance, and other overhead-type expenses. Mr. William L. Shannon is retired from the firm but is available as such a consultant at an agreed rate. Invoices for consulting work performed by a wholly-owned subsidiary of Shannon & Wilson, Inc. will be included in our invoice without markup.

5. INFORMATION PROCESSING CHARGES

The use of in-house information processing equipment will be invoiced at our current usage rate schedule (copy available upon request). The use of leased or other non-owned information processing equipment will be invoiced as a direct reimbursable expense (see paragraph 2).

6. RIGHT OF ENTRY

Unless otherwise agreed, you as the "Client" will furnish us with applicable permits and right-of-entry on the land and be responsible for the propriety of the time, place and manner of our entry to the site where we are to make borings, surveys and other explorations. We will take reasonable precautions to minimize damage to the site from use of equipment, but have not included in our proposed fee the cost of restoration of the site. If you desire us to restore the site to its approximate former condition (i.e., compaction of backfill, pavement patching, restoring lawns, vegetation, etc.), we will accomplish this by contract services and add the cost plus 12 percent to our fee. We will give you an estimate for such restoration, if requested. You agree to hold us harmless and defend us from any loss suffered by Shannon & Wilson, Inc. arising in connection with or related to our access to, entry upon, or the restoration of the site, for the purposes described in this paragraph.

7. BURIED STRUCTURES AND UTILITIES

If there are any buried structures and/or utilities such as sewer, electric, etc., on land where exploration(s) is to be made, you will provide us with a plan showing their existing locations. We and our subcontractors will use reasonable care and diligence to avoid contact with structures and/or utilities as shown. You will hold us, your "Consultant", consisting of Shannon & Wilson, Inc., and our subconsultants and subcontractors, harmless and defend us from any loss resulting from inaccuracy of the plans, or lack of plans, relating to the location of underground structures and/or utilities.

8. WORKMEN'S COMPENSATION INSURANCE

We are subject to workmen's compensation insurance (and/or employer's liability insurance) as required by applicable state statute.

9. GENERAL LIABILITY AND LIMITATION THEREOF

Shannon & Wilson, Inc. agrees to hold you harmless and to indemnify you on account of any liability due to bodily injury or property damage arising directly out of our negligent operational acts, but such hold harmless and indemnity will be limited to that covered by our comprehensive general liability insurance and not otherwise. We carry comprehensive general liability insurance, which, subject to its limits, terms and conditions, provides protection against liability arising out of bodily injury and property damage that is the direct result of our operational negligence. At your request, we will provide certificates evidencing such coverage and will purchase additional limits of liability that you may require as a separate cost item to be borne by you.

10. PROFESSIONAL LIABILITY: LIMITATION AND INDEMNITY

This paragraph relates only to professional liability and not to general liability. Shannon & Wilson, Inc.'s liability to you for all negligent acts, errors or omissions, whether active or passive, in the performance of professional services hereunder, shall not exceed Fifty-Thousand Dollars (\$50,000) or ten percent (10%) of our total invoice amount, whichever is greater, for injuries or loss to you, including any claims for cost of defense or other incurred costs. Additionally, except as expressly provided above, you agree to

defend, indemnify and save Shannon & Wilson Inc. harmless from any third-party claims for liability for injury or loss allegedly arising out of or related to Shannon & Wilson work hereunder.

11. NON-MERITORIOUS CLAIMS

In the event Shannon & Wilson, Inc. is subjected to non-meritorious claims or lawsuits (where the plaintiff does not prevail) brought by any party in connection with services rendered, or otherwise arising for any reason from the construction which is the subject of this contract, you agree to hold Shannon & Wilson, Inc. harmless from actual losses and costs incurred, including time spent by Shannon & Wilson, Inc. personnel, charged at normal billing rates, and also including attorneys' fees and other expert or service fees incurred by Shannon & Wilson, Inc. in connection with such claims or lawsuits. Your hold harmless agreement is limited to losses of the type described above and does not include payment of any judgment against Shannon & Wilson, Inc. because none would be incurred in a non-meritorious claim or lawsuit. In the event Shannon & Wilson, Inc. is found liable in the trial of any such lawsuit, then in that event this hold harmless and indemnity agreement becomes null and void and you will not be responsible for any of the losses or costs referred to herein.

Shannon & Wilson, Inc. shall have the absolute right to decide whether any such alleged non-meritorious claim or lawsuit shall be settled. Proportional contribution to any such settlement to the claimant shall be a matter of agreement between Shannon & Wilson, Inc. and yourself, but if such settlement is made, Shannon & Wilson, Inc. and you shall each pay one-half of our expenses and costs incurred in connection with the claim or lawsuit as described herein, share and share alike, including time spent by Shannon & Wilson, Inc. personnel, charged at normal billing rates, and also including attorneys' fees and other expert or service fees incurred by us in connection with such claims or lawsuits.

12. WARRANTY OF SITE CONDITIONS--DISCOVERY OF POLLUTANTS

You hereby guarantee that you do not know or have reason to know of the presence of pollutants on or under the project site or sites or on or in property which must be crossed to conduct our work. It shall be your duty to advise us of any discovery of hazardous waste or pollutants on or near the site or sites upon which work is to be performed by us, our employees, subconsultants, or subcontractors. If hazardous or dangerous pollutants are discovered during the course of or in connection with our work, it is hereby agreed that the scope of services, schedule, and the estimated project cost will be reconsidered and that this contract shall immediately become subject to renegotiation or, in the sole discretion of Shannon & Wilson, Inc., termination.

In the event we terminate this agreement because pollutants are discovered, it is agreed that we shall be paid for our total charges for labor performed to the termination notice date, plus our reimbursable charges, plus termination expenses. Termination expenses are defined as fifteen percent (15%) of our total charges for labor and reimbursables accumulated to our time of termination, plus labor and reimbursable charges related to: 1) complying with federal, state, or local laws regarding pollutants, and 2) decontamination or replacement of contaminated equipment or consumables.

13. DISPOSITION OF SAMPLES AND EQUIPMENT

All samples of unpolluted soil and rock may be discarded 30 days after submission of our final report unless you advise us to deliver the samples to you, at your sole expense, or to store them for an agreed storage charge. In the event that samples, materials, tools, or equipment, contain or come in contact with substances or constituents hazardous or detrimental to health, safety, or the environment as defined by federal, state or local statutes, regulations, or ordinances, we will, at your (Client's) expense, return such samples and materials to Client. All tools, equipment, and consumables contaminated in performing our services will be decontaminated, or disposed of and replaced, at Client's expense.

14. PAYMENTS TO ENGINEER

Invoices will be submitted periodically for prior services. Payment will be due upon receipt of invoice. An account will become delinquent 30 days after date of billing. It is agreed that a late charge will be added to delinquent accounts at the rate of one-and-one-half percent (1-1/2%) for each 30 days from the date of billing (provided the rate of such late charge shall not exceed the maximum allowable by the laws of the state in which our office submitting the invoice is located; and in that case, then the highest legal rate). If you fail to make payments to us within 30 days of receipt, we may, after giving seven days written notice to you, suspend services.

15. OTHER PROVISIONS

Neither party shall hold the other responsible for damages or delay in performance caused by weather and other acts of God, strikes, lockouts, accidents, or other events beyond the control of the other or the other's employees and agents.

This agreement shall be construed pursuant to the laws of the state in which our office submitting the proposal (confirming letter) is located. In the event any provision of this agreement is found to be unenforceable, illegal, or contrary to public policy, the remaining portions of this agreement shall remain in effect and enforceable. One or more waivers by either party of any provision, term, condition, or covenant, shall not be construed by the other party as a waiver of a subsequent breach of the same by the other party.

In the event there is a dispute between Shannon & Wilson, Inc. and yourself concerning the performance of any provision in this agreement, the losing party shall pay the prevailing party all reasonable costs incurred in connection with the dispute, including staff time, court costs, attorneys' fees and other dispute-related expenses.

It is understood and agreed that we have not been retained or compensated to provide design and construction review services relating to the safety precautions of any contractor or subcontractor who may work on the project and that we will not be providing such services.

An opinion of construction cost prepared by us represents our judgment as a design professional and is supplied for your general guidance. Since we have no control over the cost of labor and material, or over competitive bidding or market conditions, we do not guarantee the accuracy of our opinion as compared to contractor bids of actual cost to the owner.

Where tests are performed within a borehole (such as a borehole logger, Goodman jack, seismic compression and shear wave), it is possible that damage to or loss of the borehole may occur. In such event, you agree to release us from all liability for loss of borehole from any cause while or after our services are performed. It is agreed that a reasonable attempt to recover the equipment will be made at your expense beyond which we agree to accept the risk of loss or damage to our equipment while inserted in a borehole.

Test borings and test pits are an accepted and informative means of subsurface exploration. However, in the nature of things, they cannot indicate with absolute certainty the nature of the subsurface conditions between and below the test explorations. Therefore, a report based on test borings, test pits, or other exploration method cannot guarantee the nature of the subsurface conditions between and below the test explorations. If conditions different than are indicated in our report come to your attention after you receive the report, it is recommended that you contact Shannon & Wilson, Inc. immediately to authorize appropriate further evaluation and to inform Shannon & Wilson, Inc. completely on what you have discovered.

16. TERMINATION

This agreement may be terminated by either party by seven days written notice in the event of substantial failure to perform in accordance with the terms of the agreement by the other party through no fault of the terminating party. If this agreement is terminated, it is agreed that we shall be paid for our total charges for labor performed to the termination notice date, plus reimbursable charges, plus termination expenses. Termination expenses are defined as 15 percent of our total charges for labor and reimbursables accumulated to the time of termination to account for our costs of rescheduling adjustments, reassignment of personnel, and related costs incurred due to termination. Termination because pollutants are discovered is covered under Paragraph 12.

**SHANNON & WILSON, INC.**Geotechnical Consultants
Engineering and Applied Geosciences

1105 North 38th Street • P.O. Box C-30313 • Seattle, WA 98103-8067 • (206) 632-8020 • Cable: GEOSAW

March 5, 1987

Burlington Northern Railroad
2000 First Interstate Center
999 Third Avenue
Seattle, WA 98104

Attn: Mr. Howard W. Bacon

**GEOTECHNICAL PROPOSAL FOR LANDSLIDE AT NICHOLS RESIDENCE (MILE POST 7),
BELLEVUE, WASHINGTON**

As requested, we are pleased to submit our proposal for providing engineering services for the development of remedial measures for a landslide that occurred along the Burlington Northern Railroad (BNRR) embankment at about Mile Post 7. The embankment at this location is upslope of the Nichols residence, which is located on Hazelwood Lane off of Lake Washington Boulevard Southeast in Bellevue, Washington. Our proposal is based primarily on documents that were provided by BNRR representatives during a site visit on February 3, 1987. A representative from our firm and a local drilling contractor also visited the site on February 26, 1987.

Site and Project Description

The Nichols residence is located along the shore of Lake Washington. To the east and upslope of the residence is a BNRR track embankment. Immediately east of the tracks, the embankment slopes downward to a drainage depression which is about 10 to 20 feet below the embankment grade. From the base of the depression, and along the drainage ditch, the ground surface rises toward Interstate 405 and a pedestrian path that extends along the west side of the freeway. A storm drain intake is located in the depression and carries run-off beneath the railroad embankment and Nichols driveway to discharge into Lake Washington.

We understand that a landslide occurred on January 18, 1986 during extremely heavy rains. The heavy rains that occurred on this date have been described as the heaviest in 75 years and also as a 100-year storm. A storm drain intake located on the east side of the railroad embankment is reported to have plugged causing runoff water to rise between the freeway right-of-way and the railroad embankment to a height on the order of 20 feet. Shortly after reaching this height, the side of the railroad grade failed with mud and debris landing on the Nichols driveway and flowing into the basement level garage. The slide is reported to have also laterally displaced a rockery along the east margin of

Seattle • Portland • Spokane • Fairbanks • Anchorage • St. Louis

Raymond P. Miller, P.E.
Senior Vice President & ManagerGeorge Yamane, P.E.
Vice PresidentHarvey W. Parker, P.E.
Vice PresidentSenior Associates: H.H. Druebert, P.E., Thomas E. Kirkland, P.E., Atef A. Azzam, Gordon E. Green, P.E., Leif G. Eriksson
Associates: Allen B. Gifford, P.E., W. Paul Grant, P.E., Ming-Jiun Wu, P.E., Daniel N. Clayton, C.E.G., Frank W. Pita, P.E., P.G.**EXHIBIT "A"**

Burlington Northern Railroad
Attn: Mr. Howard W. Bacon
March 5, 1987
Page 2

WP-3052-1

the Nichols driveway and carport. The concrete driveway adjacent to the house was warped and broken.

Subsequent to the slide, BNRR crews constructed a timber crib wall along the west side of the railroad embankment about 5 feet east of the Nichols rockery. This was to be a temporary measure to repair the embankment and track so that rail traffic could resume.

We understand that BNRR now plans to construct more permanent stabilization measures where the slide occurred.

Scope of Work

In order to develop recommendations for remedial measures, we propose to perform the following scope of work:

● Field Explorations

In order to locate the general surface of the glacially consolidated, hard, clayey silt stratum that is present beneath the slide area, we propose to drill two borings with a truck-mounted Mobil B-61 drill rig. One boring will be drilled through the existing railroad embankment near the location of the storm drain. Based on our March 3, 1987 telephone conversation, we understand that BNRR will provide planking along the railroad embankment for drill rig access to the boring location, which is located about 1,000 feet south of the barricade on Lake Washington Boulevard. We plan to drill and sample this boring to an estimated depth of 40 feet.

We propose to drill a second boring with the truck-mounted drill rig through the Nichols driveway. We understand that BNRR will contact Mr. Nichols for permission to drill the boring through his driveway. We plan to drill and sample this boring to an estimated depth of 30 feet.

An observation well will be installed in each of the borings following completion of drilling to monitor groundwater levels.

In order to determine the depth to the hard, clayey silt east and upslope of the railroad embankment, we propose to drill two to three hand borings on the slope. We plan to extend these borings to a depth of about 10 to 15 feet below the ground surface with hand portable drilling equipment.

Representative samples will be obtained in all borings at about 2.5- and 5-foot depth intervals. For the truck borings, samples will consist of split-spoon samples obtained in conjunction with the Standard Penetration Resistance (SPT) and a few thin-wall tube samples. In the hand borings, samples will consist of split-spoon samples obtained in conjunction with the

Porter Penetration Test. All split-spoon samples will be sealed in jars and thin-wall tubes will be capped and taped. All jar samples and tubes will be transported to our laboratory for testing, as appropriate.

We plan to subcontract the truck-mounted drilling operations to an experienced local contractor (Kring Drilling Company). An engineer or geologist from our firm will observe the drilling, sampling, and installation of the observation wells and will prepare descriptive soil logs in the field. The hand borings will be accomplished by a two-man crew from our firm. Locations of all borings will be established by taping from existing features.

In order to perform stability analyses and develop recommendations for design and construction of remedial measures for stabilizing the slope, an up-to-date topo map of the area is essential, in our opinion. During our field visit on February 3, 1987, you indicated that Shannon & Wilson, Inc. should contact a surveyor and obtain an estimate for providing a topo map of the area in the event that we felt it was necessary. Subsequently, we contacted Wilsey & Ham, Bellevue, Washington, to provide an estimate for producing a topo map of the area.

- Laboratory Testing

Laboratory tests will be performed, as appropriate, for classification and correlation purposes and to determine index and engineering properties of the site soils. We anticipate that the laboratory testing will consist of natural water content determinations, Atterberg Limits, grain-size analyses, and unconfined compression tests.

- Engineering Studies and Report

A report will be prepared which will summarize the field explorations, subsurface conditions, laboratory testing, and the results of engineering studies and analyses. Conclusions and recommendations will be presented concerning slope stability and design and construction of appropriate remedial measures for stabilizing the slope.

Schedule

We are prepared to begin work upon your authorization to proceed. In our opinion, the topo map should be prepared prior to starting the drilling operations. Wilsey & Ham indicated that they have estimated three days in the field and three days in the office for preparing the topo map. The map will cover an area about 500 feet in length in the north-south direction along the railroad embankment and 150 feet in the east-west direction. In addition, Wilsey & Ham would appreciate one to two days lead time before proceeding to the field. This totals to about two weeks.

EXHIBIT "A"

SHANNON & WILSON, INC.

Burlington Northern Railroad
Attn: Mr. Howard W. Bacon
March 5, 1987
Page 4

WP-3052-1

We are prepared to begin the field explorations upon receipt of the topo map. We estimate that our field work could be accomplished in about one to two days. Our report could be completed and delivered to you within about two to three weeks following completion of the field work. Preliminary information will be provided to you informally as soon as it is developed by our studies. Four copies of our report will be provided.

Estimated Cost

We are prepared to undertake the work as described on a time and expense basis. Our fee for the above work and the terms and conditions under which our services are offered will be in accordance with the attached Agreement for Professional Services. The total cost of our services including subcontract work is estimated to be ~~\$11,700~~ ^{7,555} which we agree not to exceed without your authorization. This fee includes all work outlined in this proposal through submission of our report.

The following is a breakdown of our estimated cost:

Subcontracts

Drilling Services (Kring Drilling Co.)	\$2,425	
Topo Survey (Wilsey & Ham)	4,145	2,425
		\$ 6,570 HWB

Shannon & Wilson Services

Hand Borings and Drilling Observations	\$1,400	
Laboratory Testing	480	
Engineering Studies and Report	<u>3,250</u>	
		5,130
		7,555
Total Estimated Cost		\$ 11,700 HWB

If this proposal meets with your approval, please sign in the space provided and return one signed copy of this letter, which will serve as your authorization for us to proceed with the work. Should you issue a purchase order for this work, please make this proposal a part of the purchase order.

EXHIBIT "A"

SHANNON & WILSON, INC.

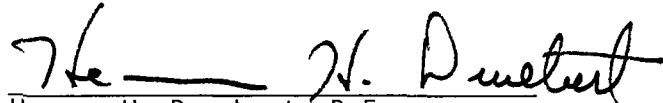
Burlington Northern Railroad
Attn: Mr. Howard W. Bacon
March 5, 1987
Page 5

WP-3052-1

We appreciate the opportunity to submit this proposal and look forward to working with you on this project.

Sincerely,

SHANNON & WILSON, INC.



Herman H. Druebert, P.E.
Senior Associate

HHD/1kn

Enclosure: Agreement for Professional Services - GH-87

I accept the above conditions and authorize the work to proceed.

By _____

Organization

Date

EXHIBIT "A"

SHANNON & WILSON, INC.

Dated: March 5, 1987

 To: Burlington Northern RR

 Attn: Mr. Howard W. Bacon
AGREEMENT FOR PROFESSIONAL SERVICES

 On the Basis of General Hourly Rates For Projects With No Known Pollutants
1. PROFESSIONAL SERVICES BY STAFF AND OFFICERS

Fees for services are based on the number of hours expended on the project, including travel, by professional, technical, and clerical personnel. The fee will be computed by multiplying the number of hours worked by each class of personnel by the hourly rate listed below for that class:

				OVERTIME	SPECIAL SERVICES
PRINCIPAL	\$95.00	SR. TECHNICIAN/DRAFTER	\$36.00	\$43.00	
SR. ASSOC./STAFF CONSULTANT	86.00	TECHNICIAN/DRAFTER	33.00	40.00	DIR. COMPUTER SCIENCE \$72.00
ASSOCIATE	73.00	CLERICAL	30.00	36.00	INFORM. RESOURCES SPEC. 51.00
SR. PRINC. ENG./GEOL./HYDRO.	63.00	JUNIOR TECHNICIAN	25.00	30.00	PROGRAM ANALYST 47.00
PRINCIPAL ENG./GEOL./HYDRO.	56.00				
SR. ENG./GEOL./HYDRO.	52.00				
ENG./GEOL./HYDRO.	43.00				

These rates are for Shannon & Wilson's current fiscal year (FY). At the end of each FY (March 31) rates will be reviewed and adjusted for the next fiscal year.

2. REIMBURSABLE EXPENSES

Expenses other than salary costs that are directly attributable to our professional services are invoiced at our cost plus 5 percent. Included are expenses for out-of-town travel and living, information processing equipment, instrumentation and field equipment rental, special fees and permits, and premiums for additional or special insurance where required; also specific job-related shipping charges and supplies in excess of \$25. In lieu of charging for miscellaneous individual direct expenses, a 3 percent surcharge will be added to each invoice amount to cover expenses for telephone, local mileage and parking, taxi, reproduction, local and out-of-town delivery service, express mail, photographs, film, and laboratory equipment fees; also specific job-related shipping charges and supplies of \$25 or less.

3. BORINGS, GEOPHYSICAL SURVEYS AND OTHER EXPLORATIONS, FIELD TESTS, LABORATORY TESTS, AND OTHER CONTRACT SERVICES

When we engage a contractor(s) for drilling or other exploration, testing, and/or other contract services, we will invoice you for the contractor's services plus 12 percent. An exception would be work performed by a wholly-owned subsidiary of Shannon & Wilson, Inc. Their invoices will be included in our invoice without markup. Borings, geophysical surveys, pile loading tests, plate bearing tests, in situ tests and other field tests conducted using our equipment and personnel will be billed at either (1) the charge for labor, as computed under the first paragraph of this schedule, plus the rental of equipment at our current equipment rental rate schedule (copy available upon request) or (2) current unit prices, if specified in the proposal. Laboratory tests performed using our equipment and personnel will be billed at either (1) the charge for labor, as computed under the first paragraph of this schedule, or (2) current unit prices, if specified in the proposal.

4. USE OF SUBCONTRACTORS AND CONSULTANTS

With the exception that Shannon & Wilson, Inc. may subcontract all or any part of its work hereunder to one or more of its subsidiary companies, it is agreed that Shannon & Wilson, Inc. may not issue subcontracts exceeding \$10,000 for any part of its work hereunder without your prior written consent, which consent shall not be unreasonably withheld. When considered necessary, other firms or consultants may be utilized with your approval, with the total cost of their services marked up 5 percent to cover taxes, insurance, and other overhead-type expenses. Mr. William L. Shannon is retired from the firm but is available as such a consultant at an agreed rate. Invoices for consulting work performed by a wholly-owned subsidiary of Shannon & Wilson, Inc. will be included in our invoice without markup.

5. INFORMATION PROCESSING CHARGES

The use of in-house information processing equipment will be invoiced at our current usage rate schedule (copy available upon request). The use of leased or other non-owned information processing equipment will be invoiced as a direct reimbursable expense (see paragraph 2).

6. RIGHT OF ENTRY

Unless otherwise agreed, you as the "Client" will furnish us with applicable permits and right-of-entry on the land and be responsible for the propriety of the time, place and manner of our entry to the site where we are to make borings, surveys and other explorations. We will take reasonable precautions to minimize damage to the site from use of equipment, but have not included in our proposed fee the cost of restoration of the site. If you desire us to restore the site to its approximate former condition (i.e., compaction of backfill, pavement patching, restoring lawns, vegetation, etc.), we will accomplish this by contract services and add the cost plus 12 percent to our fee. We will give you an estimate for such restoration, if requested. You agree to hold us harmless and defend us from any loss suffered by Shannon & Wilson, Inc. arising in connection with or related to our access to, entry upon, or the restoration of the site, for the purposes described in this paragraph.

7. BURIED STRUCTURES AND UTILITIES

If there are any buried structures and/or utilities such as sewer, electric, etc., on land where exploration(s) is to be made, you will provide us with a plan showing their existing locations. We and our subcontractors will use reasonable care and diligence to avoid contact with structures and/or utilities as shown. You will hold us, your "Consultant", consisting of Shannon & Wilson, Inc., and our subconsultants and subcontractors, harmless and defend us from any loss resulting from inaccuracy of the plans, or lack of plans, relating to the location of underground structures and/or utilities.

8. WORKMEN'S COMPENSATION INSURANCE

We are subject to workmen's compensation insurance (and/or employer's liability insurance) as required by applicable state statute.

9. GENERAL LIABILITY AND LIMITATION THEREOF

Shannon & Wilson, Inc. agrees to hold you harmless and to indemnify you on account of any liability due to bodily injury or property damage arising directly out of our negligent operational acts, but such hold harmless and indemnity will be limited to that covered by our comprehensive general liability insurance and not otherwise. We carry comprehensive general liability insurance, which, subject to its limits, terms and conditions, provides protection against liability arising out of bodily injury and property damage that is the direct result of our operational negligence. At your request, we will provide certificates evidencing such coverage and will purchase additional limits of liability that you may require as a separate cost item to be borne by you.

10. PROFESSIONAL LIABILITY: LIMITATION AND INDEMNITY

This paragraph relates only to professional liability and not to general liability. Shannon & Wilson, Inc.'s liability to you for all negligent acts, errors or omissions, whether active or passive, in the performance of professional services hereunder, shall not exceed Fifty-Thousand Dollars (\$50,000) or ten percent (10%) of our total invoice amount, whichever is greater, for injuries or loss to you, including any claims for cost of defense or other incurred costs. Additionally, except as expressly provided above, you agree to

defend, indemnify and save Shannon & Wilson, Inc. harmless from any third-party claims for liability for injury or loss allegedly arising out of or related to Shannon & Wilson's work hereunder.

11. NON-MERITORIOUS CLAIMS

In the event Shannon & Wilson, Inc. is subjected to non-meritorious claims or lawsuits (where the plaintiff does not prevail) brought by any party in connection with services rendered, or otherwise arising for any reason from the construction which is the subject of this contract, you agree to hold Shannon & Wilson, Inc. harmless from actual losses and costs incurred, including time spent by Shannon & Wilson, Inc. personnel, charged at normal billing rates, and also including attorneys' fees and other expert or service fees incurred by Shannon & Wilson, Inc. in connection with such claims or lawsuits. Your hold harmless agreement is limited to losses of the type described above and does not include payment of any judgment against Shannon & Wilson, Inc. because none would be incurred in a non-meritorious claim or lawsuit. In the event Shannon & Wilson, Inc. is found liable in the trial of any such lawsuit, then in that event this hold harmless and indemnity agreement becomes null and void and you will not be responsible for any of the losses or costs referred to herein.

Shannon & Wilson, Inc. shall have the absolute right to decide whether any such alleged non-meritorious claim or lawsuit shall be settled. Proportional contribution to any such settlement to the claimant shall be a matter of agreement between Shannon & Wilson, Inc. and yourself, but if such settlement is made, Shannon & Wilson, Inc. and you shall each pay one-half of our expenses and costs incurred in connection with the claim or lawsuit as described herein, share and share alike, including time spent by Shannon & Wilson, Inc. personnel, charged at normal billing rates, and also including attorneys' fees and other expert or service fees incurred by us in connection with such claims or lawsuits.

12. WARRANTY OF SITE CONDITIONS--DISCOVERY OF POLLUTANTS

You hereby guarantee that you do not know or have reason to know of the presence of pollutants on or under the project site or sites or on or in property which must be crossed to conduct our work. It shall be your duty to advise us of any discovery of hazardous waste or pollutants on or near the site or sites upon which work is to be performed by us, our employees, subconsultants, or subcontractors. If hazardous or dangerous pollutants are discovered during the course of or in connection with our work, it is hereby agreed that the scope of services, schedule, and the estimated project cost will be reconsidered and that this contract shall immediately become subject to renegotiation or, in the sole discretion of Shannon & Wilson, Inc., termination.

In the event we terminate this agreement because pollutants are discovered, it is agreed that we shall be paid for our total charges for labor performed to the termination notice date, plus our reimbursable charges, plus termination expenses. Termination expenses are defined as fifteen percent (15%) of our total charges for labor and reimbursables accumulated to our time of termination, plus labor and reimbursable charges related to: 1) complying with federal, state, or local laws regarding pollutants, and 2) decontamination or replacement of contaminated equipment or consumables.

13. DISPOSITION OF SAMPLES AND EQUIPMENT

All samples of unpolluted soil and rock may be discarded 30 days after submission of our final report unless you advise us to deliver the samples to you, at your sole expense, or to store them for an agreed storage charge. In the event that samples, materials, tools, or equipment, contain or come in contact with substances or constituents hazardous or detrimental to health, safety, or the environment as defined by federal, state or local statutes, regulations, or ordinances, we will, at your (Client's) expense, return such samples and materials to Client. All tools, equipment, and consumables contaminated in performing our services will be decontaminated, or disposed of and replaced, at Client's expense.

14. PAYMENTS TO ENGINEER

Invoices will be submitted periodically for prior services. Payment will be due upon receipt of invoice. An account will become delinquent 30 days after date of billing. It is agreed that a late charge will be added to delinquent accounts at the rate of one-and-one-half percent (1-1/2%) for each 30 days from the date of billing (provided the rate of such late charge shall not exceed the maximum allowable by the laws of the state in which our office submitting the invoice is located; and in that case, then the highest legal rate). If you fail to make payments to us within 30 days of receipt, we may, after giving seven days written notice to you, suspend services.

15. OTHER PROVISIONS

Neither party shall hold the other responsible for damages or delay in performance caused by weather and other acts of God, strikes, lockouts, accidents, or other events beyond the control of the other or the other's employees and agents.

This agreement shall be construed pursuant to the laws of the state in which our office submitting the proposal (confirming letter) is located. In the event any provision of this agreement is found to be unenforceable, illegal, or contrary to public policy, the remaining portions of this agreement shall remain in effect and enforceable. One or more waivers by either party of any provision, term, condition, or covenant, shall not be construed by the other party as a waiver of a subsequent breach of the same by the other party.

In the event there is a dispute between Shannon & Wilson, Inc. and yourself concerning the performance of any provision in this agreement, the losing party shall pay the prevailing party all reasonable costs incurred in connection with the dispute, including staff time, court costs, attorneys' fees and other dispute-related expenses.

It is understood and agreed that we have not been retained or compensated to provide design and construction review services relating to the safety precautions of any contractor or subcontractor who may work on the project and that we will not be providing such services.

An opinion of construction cost prepared by us represents our judgment as a design professional and is supplied for your general guidance. Since we have no control over the cost of labor and material, or over competitive bidding or market conditions, we do not guarantee the accuracy of our opinion as compared to contractor bids of actual cost to the owner.

Where tests are performed within a borehole (such as a borehole logger, Goodman jack, seismic compression and shear wave), it is possible that damage to or loss of the borehole may occur. In such event, you agree to release us from all liability for loss of borehole from any cause while or after our services are performed. It is agreed that a reasonable attempt to recover the equipment will be made at your expense beyond which we agree to accept the risk of loss or damage to our equipment while inserted in a borehole.

Test borings and test pits are an accepted and informative means of subsurface exploration. However, in the nature of things, they cannot indicate with absolute certainty the nature of the subsurface conditions between and below the test explorations. Therefore, a report based on test borings, test pits, or other exploration method cannot guarantee the nature of the subsurface conditions between and below the test explorations. If conditions different than are indicated in our report come to your attention after you receive the report, it is recommended that you contact Shannon & Wilson, Inc. immediately to authorize appropriate further evaluation and to inform Shannon & Wilson, Inc. completely on what you have discovered.

16. TERMINATION

This agreement may be terminated by either party by seven days written notice in the event of substantial failure to perform in accordance with the terms of the agreement by the other party through no fault of the terminating party. If this agreement is terminated, it is agreed that we shall be paid for our total charges for labor performed to the termination notice date, plus reimbursable charges, plus termination expenses. Termination expenses are defined as 15 percent of our total charges for labor and reimbursables accumulated to the time of termination to account for our costs of rescheduling adjustments, reassignment of personnel, and related costs incurred due to termination. Termination because pollutants are discovered is covered under Paragraph 12.